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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,739	01/24/2002	Masaaki Nishino	01USFP710-K.N.	4250

7590

04/21/2004

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EXAMINER
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ANYASO, UCHENDU O

ART UNIT	PAPER NUMBER
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2675

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DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,739

Applicant(s)

NISHINO, MASAOKI

Examiner

Uchendu O Anyaso

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9,12-14,16-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9,12-14,16-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. **Claims 1-9, 12-14, 16-19 and 21-23** are pending in this action.

***Claim Rejections - 35 USC ' 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-9, 12-14, 16-19 and 21-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Fan* (U.S. 5,926,168) in view of *Hashimoto* (U.S. 5,554,980).

Regarding **independent claims 1, 16 and 22**, and for **claims 21 and 23**, Fan teaches a computer system 30 comprising a display screen 20, a pointing device 40 and buttons 41 (figure 1 at 20, 30, 40, 41).

Furthermore, Fan teaches that with the cursor 10 on display means 20 directly controlled by the user, the user can easily interact with the computer or interactive TV 30 with the press and release of one or a few select buttons 41 fixed on the pointing means 40 wherein the actions of these selection buttons 41 are coded with either infrared or electromagnetic waves, and is transmitted wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41).

Furthermore, Fan teaches how the pointing device emits a beam of light (figure 2).

Art Unit: 2675

Furthermore, Fan teaches how to determine the position on the display means 20 pointed by the pointing means 40 and input that position into the computer 30 as the position of the cursor 10 (column 6, lines 20-29).

Also, Fan teaches a position detecting unit by teaching angle detector 140, and electronic circuitry for using the light signal measured by the photo detector in the light scope to determine the position on the television screen pointed by said remote control, whereby the television can display the cursor at the position on the television screen pointed by said remote control (column 30, lines 5-12). This is accomplished in real time by the following mechanism: Angle detector 140 measures the angle 141 between the base line 160 and the line connecting the angle detector 140 and the light spot 130 wherein the angle detector 150 measures the angle 151 between the base line 160 and the line connecting the angle detector 150 and the light spot 130 such that the measured angles 141 and 151, along with the distance between angle detectors 140 and 150, are input into the computer or into a dedicated Digital Signal Processor (DSP) to calculate the coordinate of the light spot 130 wherein the calculated coordinated is taken as the position of the cursor 10 (column 6, lines 57-67, figure 2).

Furthermore, Fan teaches a processing unit by teaching a remote pointing device comprising a microprocessor based machine (30), display means (20), a cursor (10), pointing means (40), means for determining the position on the display means (20) pointed by the pointing means (40), and means for inputting into the microprocessor based machine (30) the position on the display means (20) pointed by the pointing means (40) as the position of the cursor (10) (see Abstract). Also, Fan teaches how the microprocessor based machine (30) with the display means (20) interacts with actuation of the pointing means (40) and outputting of the

Art Unit: 2675

signal generated by the position measuring apparatus (990) to move the cursor 10 to the detected position (*see* figure 10, column 16, lines 51 through column 17, lines 9).

However, Fan does not teach the concurrent/simultaneous actuation of the position indicating button and the outputting of the position-indicating signal. On the other hand, Hashimoto teaches this concept by teaching a remote control system in which, through (1) angular motion of remote control unit 1 in space toward the front, back, left or right to point toward the desired icon **and** (2) use of the selection switch 9, instructions can be issued and operation effected, enabling control of a controlled unit that can be controlled by a mouse (column 20, lines 56-67; column 26, lines 5-16, figure 34 at 9, 24).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Fan and Hashimoto because while Fan teaches how a microprocessor based machine (30) with the display means (20) interacts with actuation of the pointing means (40) and outputting of the signal generated by the position measuring apparatus (990) to move the cursor 10 to the detected position (*see* figure 10, column 16, lines 51 through column 17, lines 9), Hashimoto teaches how the position indicating button and the outputting of the position indicating signal would be activated simultaneously in order to facilitate actuation of the cursor on the computer screen. The motivation for combining these inventions would have been to facilitate actuation of the cursor on the computer screen (column 20, lines 56-60).

Regarding **claims 2 and 17**, in further discussion of claims 1 and 16, Fan teaches how the user can easily interact with the computer or interactive TV 30 with the press and release of one or a few select buttons 41 fixed on the pointing means 40 wherein the actions of these selection

Art Unit: 2675

buttons 41 are coded with either infrared or electromagnetic waves, and is transmitted wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41).

Regarding **claims 3 and 18**, in further discussion of claims 1 and 16, Fan teaches how the display screen includes an LCD (column 5, lines 61-64).

Regarding **claim 4**, in further discussion of claim 3, Fan teaches that the light spot, on display means created by a light beam from pointing means, is measured with two arrays of photo detectors (240, 241) and a processing means in the form of a computer or dedicated DSP that is capable of processing the beam signals (column 7, lines 10-34, figure 3a at 240, 241; column 6, lines 61-67).

Regarding **claims 5 and 19**, in further discussion of claims 1 and 16, Fan teaches a spot on the display means at which sonic wave from pointing means is scattered, is measured by three sonic receivers (340, 350, 360) fixed on display means (figure 4, column 3, lines 54-56).

Regarding **claim 6**, in further discussion of claim 5, Fan teaches two arrays of photo detectors (240, 241) arranged in row and column fashion (figure 3a at 240, 241; column 6, lines 61-67).

Regarding **claim 7**, in further discussion of claim 6, Fan teaches how the display screen includes a CRT display (column 5, lines 61-64).

Regarding **claims 8 and 9**, in further discussion of claim 1, Fan does not teach the pointing device including an LED or laser. On the other hand, Hashimoto teaches a pointing device in the form of a remote control system comprising LEDs (12a-12e) (*see* figure 55 at 12a-12b).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Fan and Hashimoto because while Fan teaches a pointing device transmits infrared or electromagnetic waves wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41), Hashimoto teaches a pointing device in the form of a remote control system comprising LEDs (12a-12e) (*see* figure 55 at 12a-12b). The motivation for combining these inventions would have been to design a scheme wherein the receiving unit 25 is able to receive the transmitted signals by the remote control unit at all times (column 9, lines 26-28).

Regarding **claims 12-14**, in further discussion of claim 6, Fan teaches a position detecting unit by teaching angle detector 140, and electronic circuitry for using the light signal measured by the photo detector in the light scope to determine the position on the television screen pointed by said remote control, whereby the television can display the cursor at the position on the television screen pointed by said remote control (column 30, lines 5-12). This is accomplished in real time by the following mechanism: Angle detector 140 measures the angle

Art Unit: 2675

141 between the base line 160 and the line connecting the angle detector 140 and the light spot 130 wherein the angle detector 150 measures the angle 151 between the base line 160 and the line connecting the angle detector 150 and the light spot 130 such that the measured angles 141 and 151, along with the distance between angle detectors 140 and 150, are input into the computer or into a dedicated Digital Signal Processor (DSP) to calculate the coordinate of the light spot 130 wherein the calculated coordinated is taken as the position of the cursor 10 (column 6, lines 57-67, figure 2).

### *Response to Arguments*

4. Applicant's arguments filed January 21, 2004 have been fully considered but they are not persuasive.

Applicant amended independent claims 1, 16 and 22 to emphasize the feature of the concurrent actuation of the position indicating button and outputting of this position indication signal in order to facilitate moving the cursor to the detected position. In response to applicant's amendments and arguments Fan and Hashimoto were combined because Hashimoto teaches the newly added feature, and there is a motivation to combine Fan and Hashimoto.

Specifically, Hashimoto teaches how a remote control system in which, through (1) angular motion of remote control unit 1 in space toward the front, back, left or right to point toward the desired icon **and** (2) use of the selection switch 9, instructions can be issued and operation effected, enabling control of a controlled unit that can be controlled by a mouse (column 20, lines 56-67; column 26, lines 5-16, figure 34 at 9, 24).



Art Unit: 2675

Thus, it would have been obvious to a person of ordinary skill in the art to combine Fan and Hashimoto because while Fan teaches how a microprocessor based machine (30) with the display means (20) interacts with actuation of the pointing means (40) and outputting of the signal generated by the position measuring apparatus (990) to move the cursor 10 to the detected position (*see* figure 10, column 16, lines 51 through column 17, lines 9), Hashimoto teaches how the position indicating button and the outputting of the position indicating signal would be activated simultaneously in order to facilitate actuation of the cursor on the computer screen. The motivation for combining these inventions would have been to facilitate actuation of the cursor on the computer screen (column 20, lines 56-60).

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

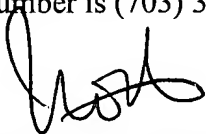
Application/Control Number: 10/053,739

Page 9

Art Unit: 2675

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Uchendu O. Anyaso

04/18/2004



CHANH NGUYEN  
PRIMARY EXAMINER